CLAIMS

What is claimed is:

1. A torque converter comprising:

a pump wheel;

a turbine wheel comprising a turbine wheel shell and a turbine wheel base connected to said shell, said turbine wheel being supported axially and radially with respect to a turbine wheel hub by a first bearing;

a stator provided between the pump wheel and the turbine wheel, said stator being mounted on a stator hub which is supported axially against said turbine wheel base by a second bearing located radially inside of the first bearing, said pump wheel, said turbine wheel, and said stator forming a hydrodynamic circuit,

a primary damper element which is acted on by the turbine wheel by way of an intermediate element; and

a secondary damper element which is fixed against rotation with respect to said turbine wheel hub and is connected to said primary damper element in a rotationally elastic manner by a set of springs.

2. A torque converter as in claim 1 wherein the intermediate element, the turbine wheel shell, and the turbine wheel base are connected to each other by common connecting elements.

3. A torque converter as in claim 2 wherein said connecting elements are rivets.

4. A torque converter as in claim 1 wherein said turbine wheel has a part against which the intermediate element rests, said part having a shape, said intermediate element conforming to said shape.

5. A torque converter as in claim 1 wherein the turbine wheel shell has an area of maximum axial dimension, said intermediate element being located radially inward of said area of maximum axial dimension.

6. A torque converter as in claim 1 wherein the intermediate element and the primary damper element each comprise teeth, the teeth of the intermediate element engaging the teeth of the primary damper element.

7. A torque converter as in claim 1 further comprising a bridging clutch connecting the pump wheel to the primary damper element.

8. A torque converter as in claim 7 wherein the bridging clutch comprises a plurality of axially aligned clutch disks.

9. A torque converter as in claim 1 wherein the primary damper element engages the secondary damper element to form a rotational angle limiter, said limiter being located radially inward of said first bearing.

10. A torque converter as in claim 9 wherein said primary damper element and said secondary damper element have teeth which engage with circumferential play to form said rotational angle limiter.

11. A torque converter as in claim 1 wherein the turbine wheel hub comprises a radial web having a radially outer end provided with an axially extending flange having a radially outside surface, said first bearing being located on the radially outside surface of the flange.

12. A torque converter as in claim 11 wherein said turbine wheel base extends radially inward from said turbine wheel shell, said base having a bent section which extends axially under said flange and a radially inner end, said second bearing lying against said radially inner end.

13. A torque converter as in claim 1 wherein said first bearing is a plain bearing having an L-shaped cross-section.

14. A torque converter as in claim 1 wherein the second bearing is a roller bearing.

15. A torque converter as in claim 14 wherein the roller bearing is a ball bearing.